

Work Order ID 74712

Wednesday, October 05, 2011 12:57:06 PM



U/R

Page 1

Item ID: D350-748-141TRN

Accept



Setup Start



Revision ID: U/R

Item Name: Crosstube Turning Detail

Start Date: 10/5/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 10/14/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: M.L.J

Date: 11/10/05 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D350-748-141

F U/R

OK 11.10.06

100



MORI SEIKI CNC LATHE LARGE

Mori Seiki

Mori Seiki CNC Lathe Large

Memo

0.00

- 1-Fill tube with sand & install plugs on both ends as per Folio FA648
- 2-Turn first side as per Folio FA648
- 3- File transition lines smooth.

FOLIO REV: A

DWG REV: F

110



QC1- Inspect dimensions to dimension sheet

0.00

QC

Quality Control

Memo

0.00

L Ø

MML 12/02/10

L Ø

MML 12/02/10

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

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Page 2

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Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**Sequence ID/  
Work Center ID****Operation  
Description**Set Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120



MORI SEIKI CNC LATHE LARGE

0.00

Mori Seiki

Mori Seiki CNC Lathe Large

**Memo**

0.00

1-Turn second side as per Folio FA648  
 2- File transition lines smooth.  
 3-Scribe Part & Batch as per Dwg D350-748-141  
 FOLIO REV: A  
 DWG REV: A

130



QC1- Inspect dimensions to dimension sheet

0.00

**Memo**

0.00

Quality Control

140



QC8- Inspect parts - second check

0.00

**Memo**

0.00

Quality Control

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Required Date: 10/14/2011 Req'd Qty: 1.00



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Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**Sequence ID/  
Work Center ID****Operation  
Description**Set Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150



Large Fab

0.00

1 Ø

Crosstubes

Memo

0.00

Crosstubes

Grind machining marks

MMV 12/02/15

160



Outsource process - Heat Treat

0.00

Outsource1

Memo

166000

0.00

Outsource process - Heat Treat

Issue P/O:

16274

Heat Treat to min 180 KSI As per Dwg D350-748-141  
(MIL-T-6736 OR AMS 2759-1C)

Sand Blast tube after Heat Treat

Possible Supplier: Vac Aero

Ensure Certificate of Conformity is attached

CL 12/03/29 Ø

170



Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00

Packaging

Memo

0.00

Packaging

Ensure certificate of conformaty is attached

Rejpo Ø

W/O:		WORK ORDER CHANGES						
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	P	E						

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Page 4

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Required Date: 10/14/2011 Req'd Qty: 1.00



Customer:

**Reference:**

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center ID

180



QC

Quality Control

Operation  
Description

QC6- Inspect dimensions to drawing

see last page inspection sheet  
MemoSet Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp0.00  
S17/05/12

190



Packaging

Packaging

0.00

Packaging

Memo

Identify and stock in kanban rack  
Location: \_\_\_\_\_

0.00

200



QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Quality Control

MCJ 12/06/26

MCJ 12/06/25

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# Picklist Print

Page 1

Wednesday, October 05, 2011 12:57:11 PM

Work Order ID: 74712



Parent Item: D350-748-141TRN



Parent Item Name: Crosstube Turning Detail

Start Date: 10/5/2011

Required Date: 10/14/2011

Start Qty: 1.00

Required Qty: 1.00

**Comments:**

IPP Rev:A New Issue 08-03-06 DD verified by:ec  
IPP Rev B Removed polish 08.04.02 EC verified by :DD  
IPP Rev C Remove LPS-3 08.06.23 EC verified by DD IPP Rev C  
1.1.02.24 as per dwg rev.F DD verf: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6015-125		Manufactured	No			110	Each	22.0000	1	1			

Crosstube Material



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
HALL	22	
61380	22	

7250

1 mm. L 12/02/06

W/O:		WORK ORDER CHANGES							
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NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	74712
Description: Crosstube Assembly (AS350/355 High Fwd)	Part Number:	D350-748-141
Inspection Dwg: D350-748-141 Rev: F		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.245	/	Vern	CWC-08
	2.180	+0.005/-0.000	2.185	/		
	2.180	+0.005/-0.000	2.185	/		
	2.237	+0.005/-0.000	2.242	/		
	2.272	+0.005/-0.000	2.276	/		
	2.306	+0.005/-0.000	2.310	/		
	2.339	+0.007/-0.000	2.345	/		
	2.339	+0.007/-0.000	2.344	/		
	0.062	+/-0.010	0.062	/	Vern	CWC-09
	4.26	+/-0.030	4.26	/	RG	
	R0.063	+/-0.010	0.063	/	RG	
	R0.50	+/-0.030	0.500	/	II	
SIDE B	2.240	+0.005/-0.000	2.245	/	Vern	CWC-08
	2.180	+0.005/-0.000	2.184	/		
	2.180	+0.005/-0.000	2.184	/		
	2.237	+0.005/-0.000	2.240	/		
	2.272	+0.005/-0.000	2.275	/		
	2.306	+0.005/-0.000	2.308	/		
	2.339	+0.007/-0.000	2.345	/		
	2.339	+0.007/-0.000	2.344	/		
	0.062	+/-0.010	0.062	/	Vern	CWC-09
	4.26	+/-0.030	4.26	/	II	
	R0.063	+/-0.010	0.063	/	RG	
	R0.50	+/-0.030	0.500	/	II	
	110.27	+/-0.060	110.27	S	Type	PPML-02

Measured by:	MML	Audited by:	DP	Preliminary Approval:	
Date:	12/02/09	Date:	12-2-13	Date:	

Rev	Date	Change	Revised by	Approved
A	06.11.09	New Issue (P/O D350-748-101)	KJ/JLM	
B	07.10.24	Dwg Rev updated	KJ/EC/DD	
C	11.01.20	Dwg Rev updated	KJ	
D	11.07.26	Tolerance revised for 2.339 dimensions	KJ	kg M

W/O:		WORK ORDER CHANGES					
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DART AEROSPACE LTD

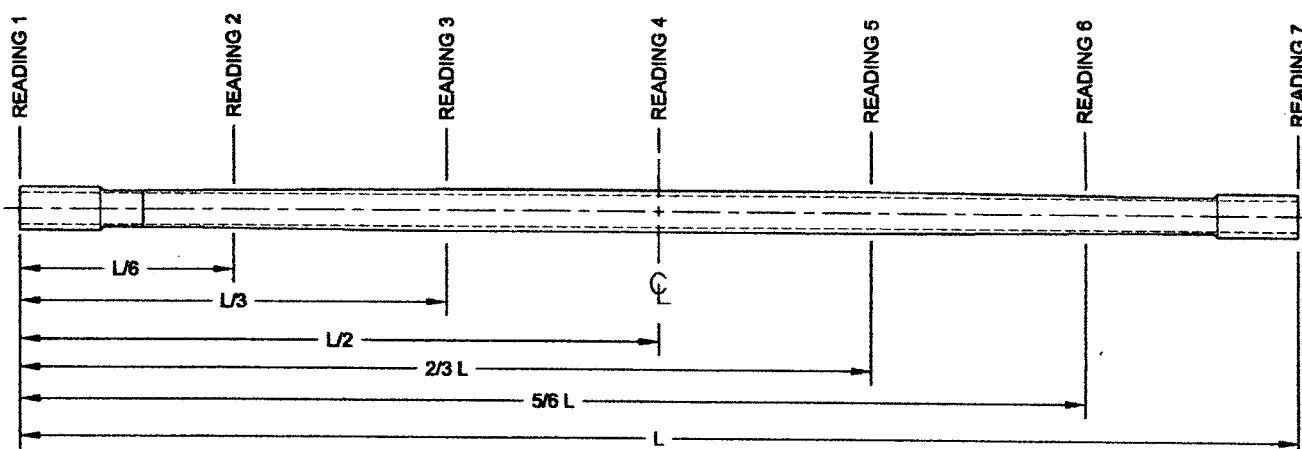
Work Order: 74712

Description:

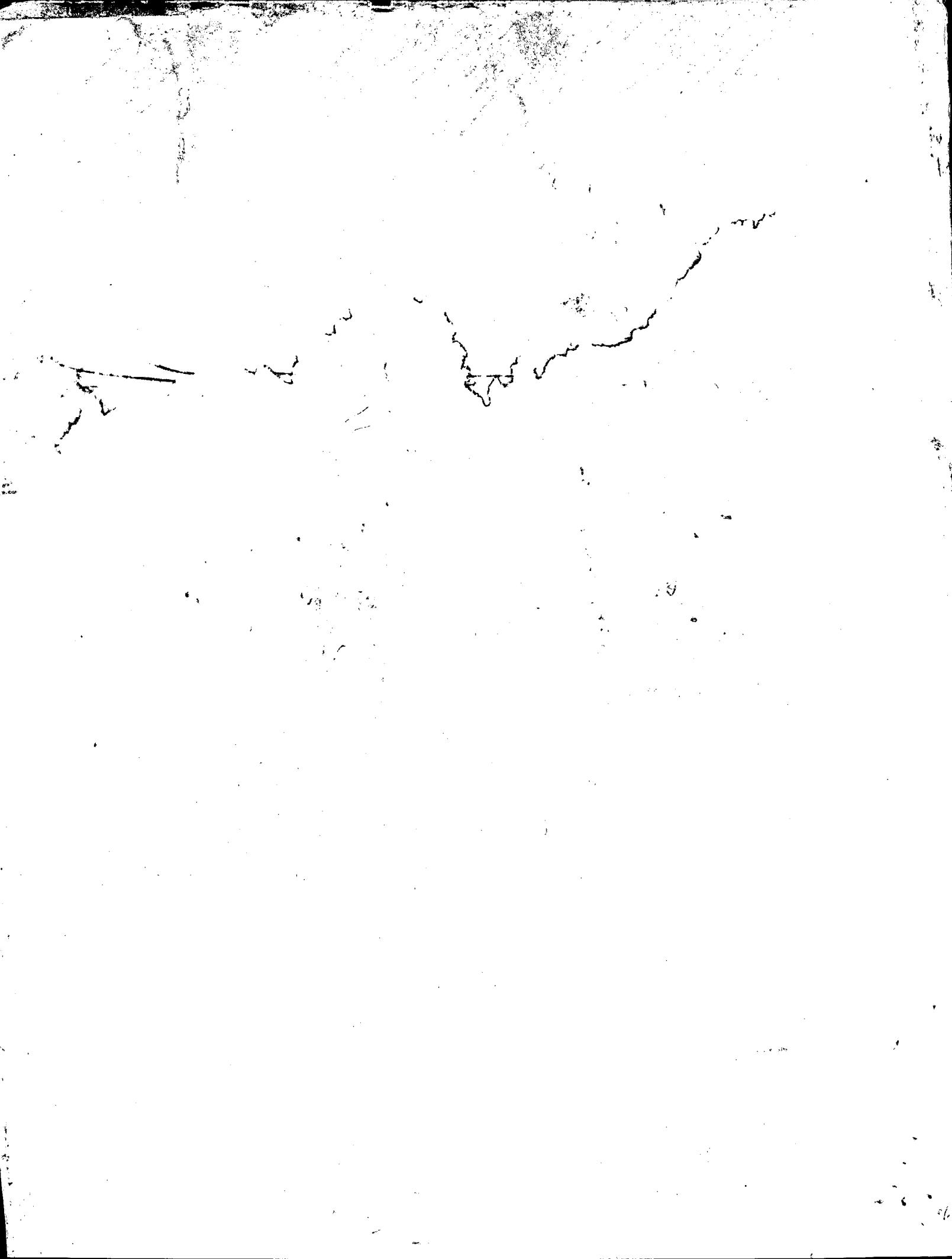
Part Number: 350-7498-141

Inspection Dwg:

Page 1 of 1

WALL THICKNESS MEASUREMENT

	WALL THICKNESS MEASUREMENT (IN)				DEVIATION (max-min)	TOLERANCE
	Q1	Q2	Q3	Q4		
READING 1 L= 0"						
READING 2 L= 18"	.143	.127	.132	.157		
READING 3 L= 37	.176	.170	.183	.192		
READING 4 L=						0.030"
READING 5 L= 18"	.141	.128	.132	.152		
READING 6 L= 55"	.187	.176	.182	.179		
READING 7 L=						



8 7 6 5 4 3 2 1

Item	Qty	Part Number	Description
1	X	D350-748-141	CROSSTUBE ASSEMBLY (AS 350/355 HI FWD)
2	1	D6015-125	CROSSTUBE (OR D6017-115)
3	2	D3502-1	SUPPORT
4	2	D2856-400-710	ABRASION STRIP
5	1	AELS-1032-225	INSERT
6	1	NAS1149D0363J	WASHER (OR AN960JD10)
7	2	MS21920-20	CLAMP (PER DART SPEC. M-MS21920-20)
8	1	MS27039-1-10	SCREW

**GENERAL NOTES:**

- F 1) MATERIAL: MANUFACTURED FROM D6015-125 OR D6017-115  
FINISHED LENGTH = 110.270±0.06
- F 2) FINISH: MAGNETIC PARTICLE INSPECT PER DART QSI 038 4.2  
CADMIUM PLATE PER AMS-QQ-P-416B, CLASS 1, TYPE II  
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2  
PAINT OUTSIDE PER DART QSI 005 4.2
- F 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- F 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- F 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- F 6) IDENTIFICATION: DART PART NUMBER "D350-748-141" AND BATCH NUMBER ON INSIDE OF CUFF  
PER DART QSI 044 6.4 (VIBRATING STYLUS)
- F 7) WEIGHT: 30.45 lbs
- F 8) PART IS SYMMETRIC ABOUT CENTERLINE, EXCEPT FOR Ø0.297 HOLE.
- F 9) BLEND OUT ALL EDGES FROM MACHINING LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.  
NOTE: ALL HOLES ARE DRILLED AFTER BENDING.
- F 10) BEND PROGRESSIVELY WITH A MINIMUM OF 7 PASSES. MAXIMUM TUBE FLATTENING DUE TO  
BENDING IS 6% BASED ON O.D.
- F 11) HEAT TREAT TO MIN. 180 KSI PER MIL-T-6736 OR AMS 2759-1C AFTER TURNING. ACCEPTABLE TO  
VERIFY TENSILE STRENGTH BY HARDNESS TEST PER ASTM E18 TO 40-45 HRC.
- F 12) INSTALL D2856-400-710 ABRASION STRIPS WITH A GAP ON BOTTOM SIDE OF CROSSTUBE,  
CENTERED OPPOSITE D3502-1 SUPPORT, PER QSI 035.
- F 13) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE  
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES,  
NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY.  
CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE. WHEN DRILLING HOLES EXTREME CARE  
MUST BE TAKEN AND CAREFUL DEBURRING PERFORMED TO ENSURE A CLEAN HOLE WITH NO  
CRACKING/CHIPPING/GROOVES.
- F 14) TORQUE CLAMPS 60 TO 80 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT  
NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
- F 15) MAX TWIST AFTER BENDING: WITH XTUBE LAYED FLAT ON SURFACE, THE DIFFERENCE BETWEEN  
CUFF HEIGHTS FROM THE SURFACE MAY BE NO LARGER THAN 0.25 (ZN C1-3).

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 74712 M.L.J

11/10/05

UNDER REVIEW

11/07/05

RELEASED

2011-01-18

F	ADD HRC TEST OPTION (B8-1) PER PAR 09-040, ADD TWIST LIMIT (A8-1, C1-3), ADD D6015-125 OPTION (C8-1), STOCK DIM NOW MACHINED (D1-4)		CP	10.11.23
E	REVISE GENERAL NOTES; UPDATE TO CURRENT ADD STANDARDS; RELOCATED FLAG #6 PER PAR 08-046 (ZN A6-3); TOLERANCES (ZN C6-3, D1-3)		RF	09.09.30
D	MAG. PARTICLE AND CAD PLATING AS MFD.		CP	06.10.31
C	ADD CAD PLATING		CP	06.08.14
B	ADD D6017-115 & PRIME AND PAINT		CP	06.06.30
A	NEW ISSUE		CP	06.03.31
REV.	DESCRIPTION		BY	DATE
DESIGN	99	DART AEROSPACE LTD		
DRAWN	99	HAWKESBURY, ONTARIO, CANADA		
CHECKED		DRAWING NO.	REV. F	
MFG. APPR.		D350-748-141		SHEET 1 OF 4
APPROVED		TITLE	SCALE	
DE APPR.		CROSSTUBE (AS 350/355 HI FWD)	NTS	
DATE	10.11.23		COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED BY THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY OTHER PURPOSE. IT IS THE PROPERTY OF DART AEROSPACE LTD AND IS TO BE RETURNED TO THAT PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

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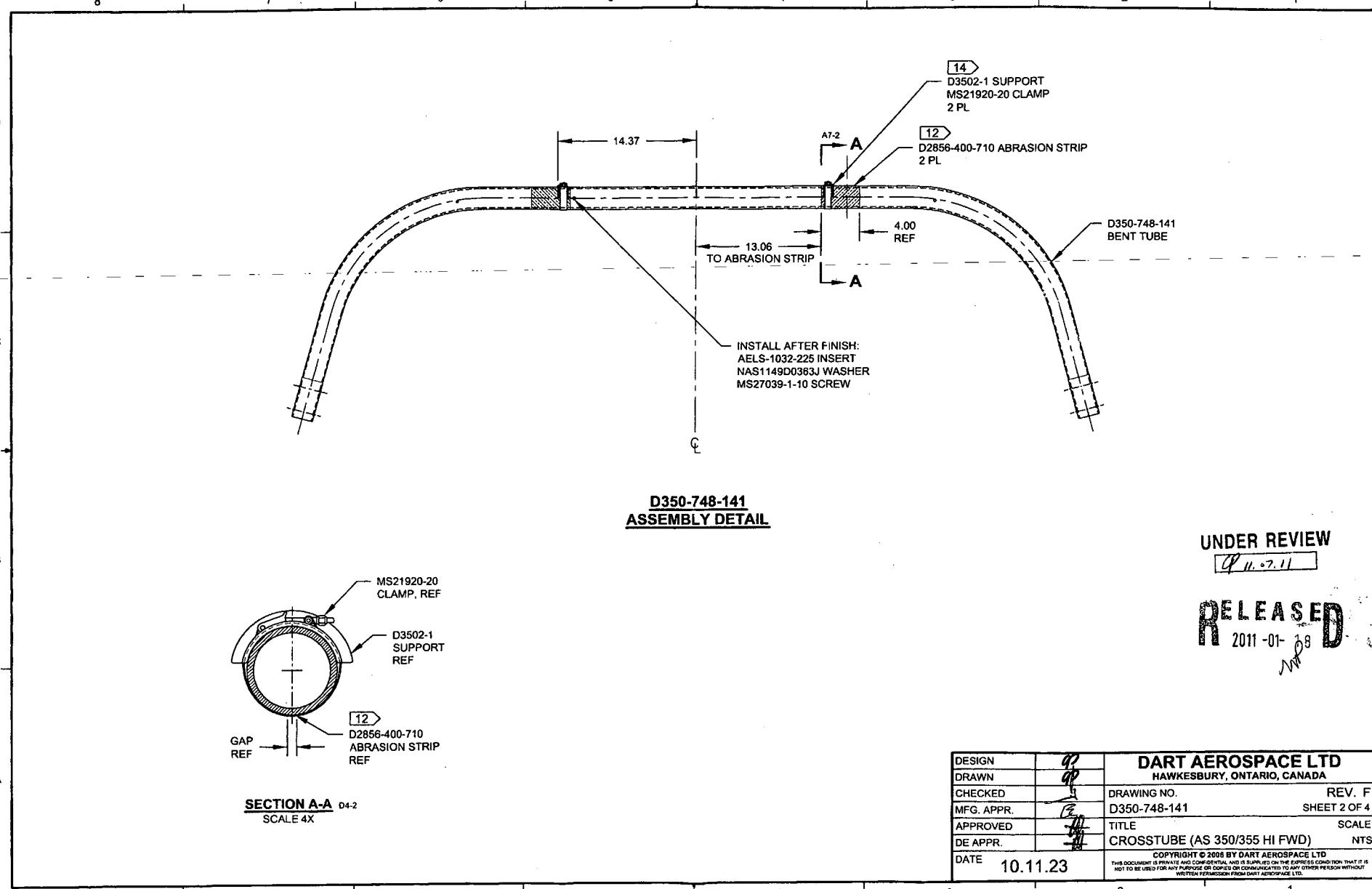
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W/O:

E, E

## WORK ORDER CHANGES

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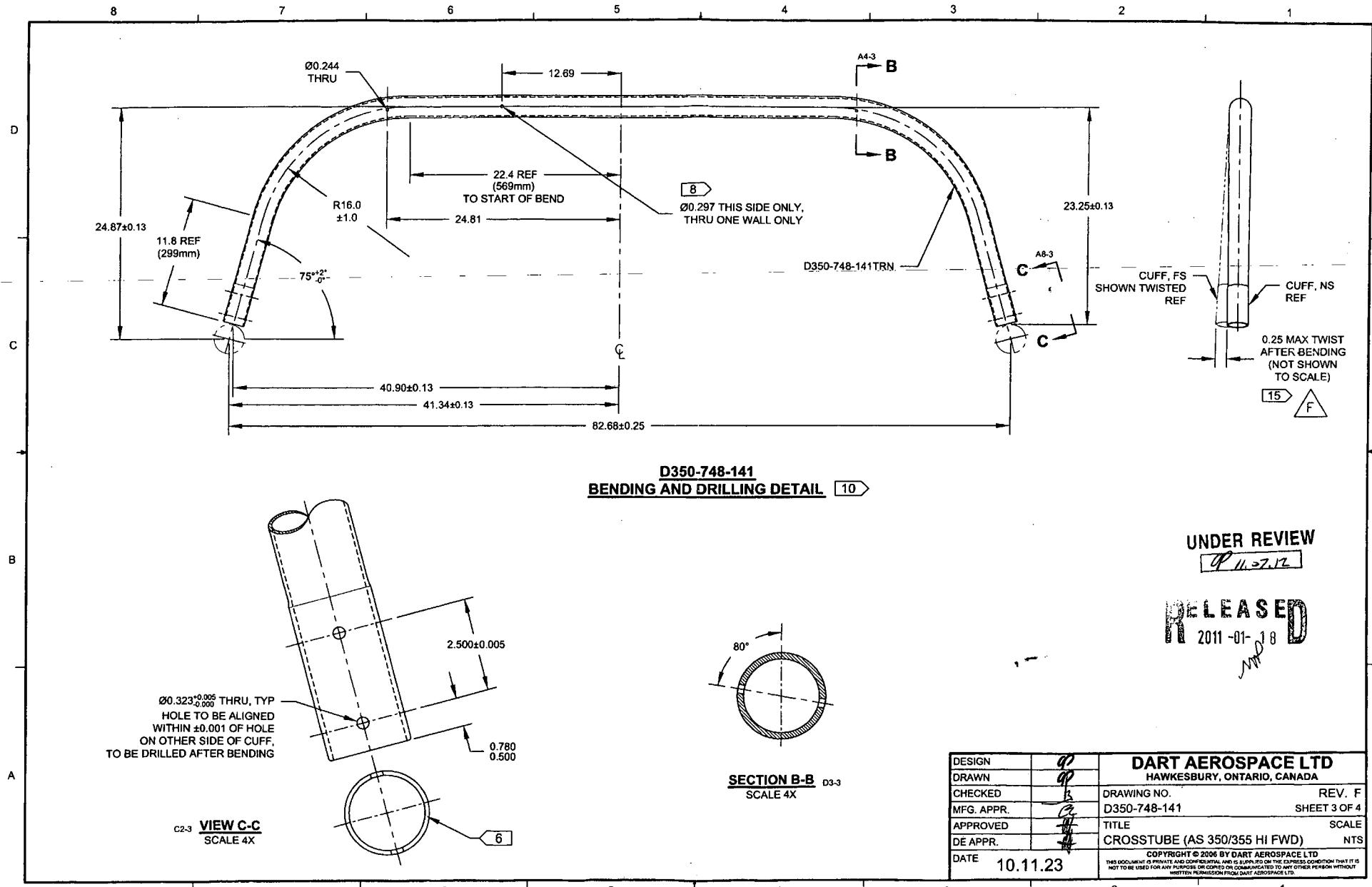
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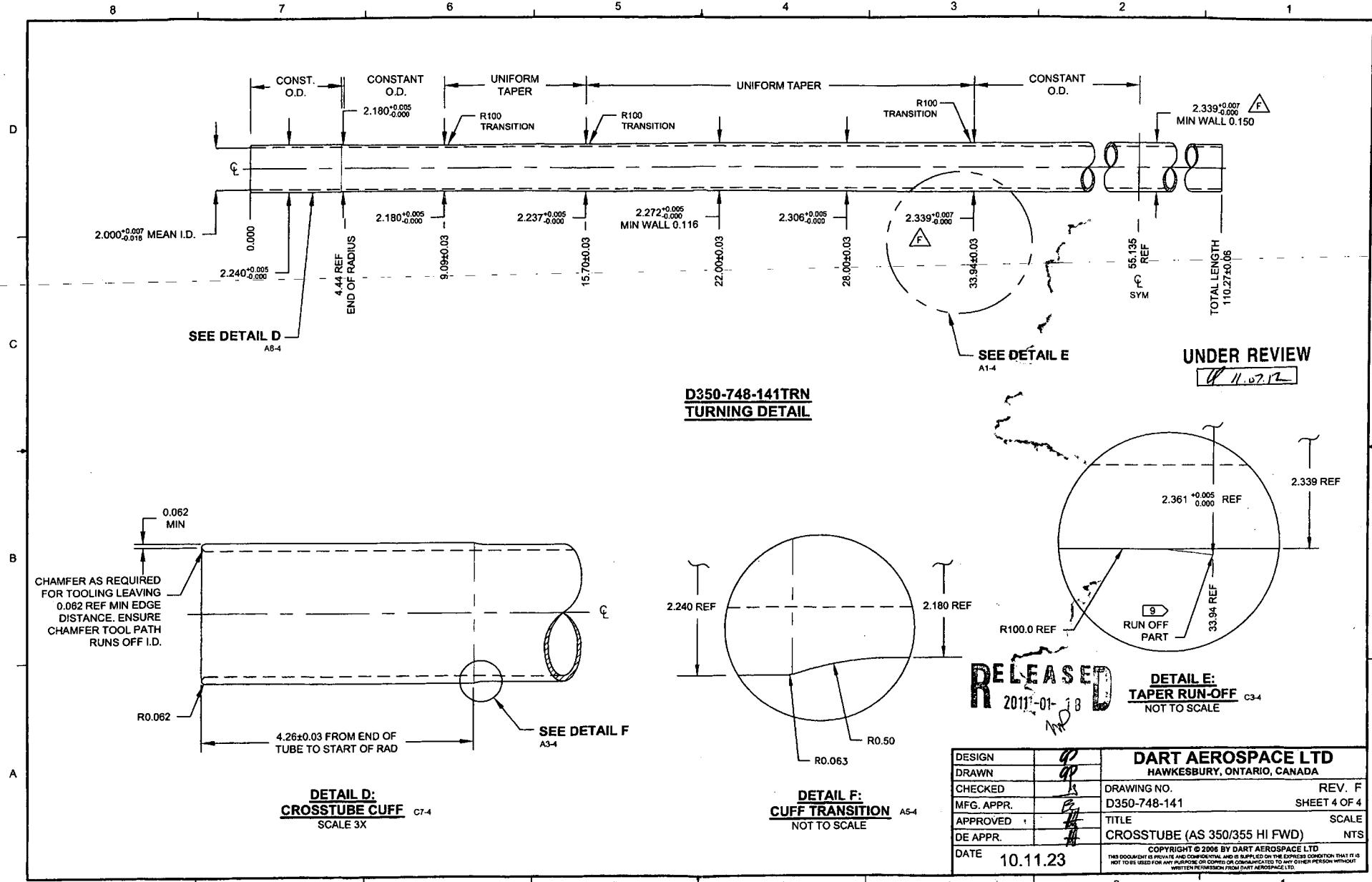
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NOTE: Date &amp; initial all entries

Packing Li

Sales Order Num

71

Sales Order D

Apr 3, 20

Pa

METLAB  
1000 E. MERMAID LANE  
WYNDMOOR, PA 19038

Voice: 215-233-2600  
Fax: 215-233-5653

Sold To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Ship To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PQ16600	Net 30 Days
Ship Via		Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipme
1.00	✓	1 PC. 74672 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 74673 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 74676 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 74678		

COMMENTS

SHIPPED BY SIGNATURE  
METLAB

DATE

RECEIVED BY, SIGNATURE  
DART AEROSPACE

DATE

**METLAB**  
**1000 E. MERMAID LANE**  
**WYNDMOOR, PA 19038**

**Packing L.**

Sales Order Num

71

Sales Order I

Apr 3, 2

F

Voice: 215-233-2600  
Fax: 215-233-5653

Sold To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Ship To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
	Ship Via	Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipm
1.00	✓	D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 74712		
1.00	✓	D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 74718		
1.00	✓	D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 79010		
		D-350-748-141TRN CROSSTUBE		

COMMENTS

SHIPPED BY, SIGNATURE  
METLAB

DATE

5/1/12

RECEIVED BY, SIGNATURE  
DART AEROSPACE

DATE

METLAB  
1000 E. MERMAID LANE  
WYNDMOOR, PA 19038

Voice: 215-233-2600  
Fax: 215-233-5653

71  
Sales Order I  
Apr 3, 2012

Sold To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Ship To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
Ship Via		Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipment
1.00	✓	HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 79011 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 79013 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 1 PC. 73372 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓			
1.00	✓			

COMMENTS

SHIPPED BY SIGNATURE  
METLAB

5/1/12  
DATE

RECEIVED BY, SIGNATURE  
DART AEROSPACE

DATE

**Packing L**

Sales Order Num

71

Sales Order I

Apr 3, 2

F

**METLAB**  
**1000 E. MERMAID LANE**  
**WYNDMOOR, PA 19038**

Voice: 215-233-2600  
Fax: 215-233-5653

Sold To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Ship To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
	Ship Via	Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shippm
1.00	✓	1 PC. 73375 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)\		
1.00	✓	1 PC. 79391 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 79392 D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC)		
1.00	✓	1 PC. 79393		

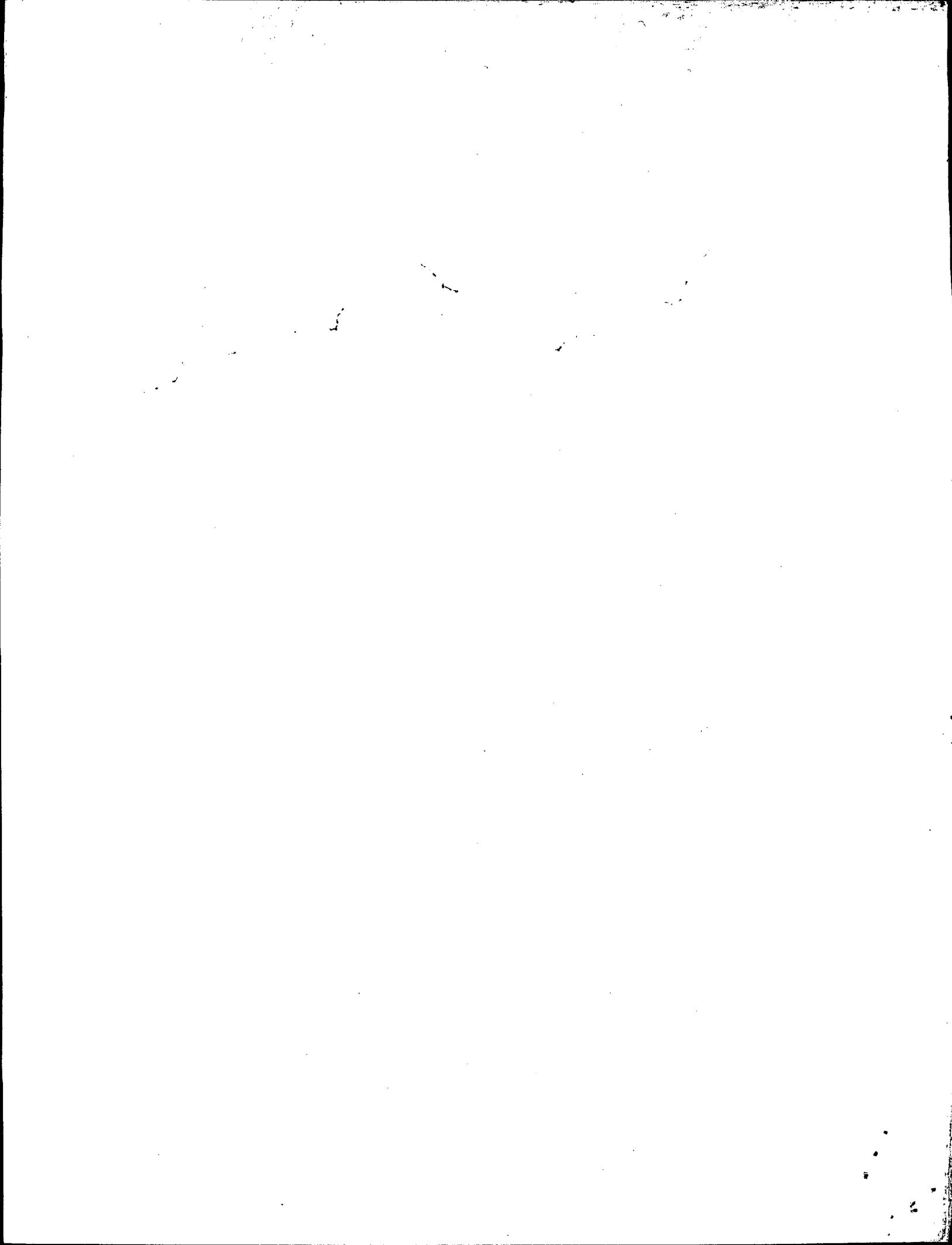
COMMENTS

SHIPPED BY, SIGNATURE  
METLAB

5/1/12  
DATE

RECEIVED BY, SIGNATURE  
DART AEROSPACE

DATE



**Packing L**

Sales Order Num

71

Sales Order I

Apr 3, 2

F

**METLAB**  
**1000 E. MERMAID LANE**  
**WYNDMOOR, PA 19038**

Voice: 215-233-2600  
Fax: 215-233-5653

Sold To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Ship To:  
DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Customer ID	PO Number	Payment Terms
DARA	PO16600	Net 30 Days
Ship Via		Process
	YRC	

Quantity	Item	Description	Total Shipped	This Shipment
		D-350-748-141TRN CROSSTUBE HEAT TREAT TO MIN 180 KSI (MIL-T-6736OR AMS 2759-IC) 560 POUNDS TOTAL		

COMMENTS


  
SHIPPED BY SIGNATURE  
METLAB

5/1/12

DATE


  
RECEIVED BY, SIGNATURE  
DART AEROSPACE

DATE

## Certification

### SOLD TO

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7

May 1, 2012

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**Metlab Shop Order No:** 71785  
**Purchase Order:** 16600  
**Description:** Crosstube  
**Part No.:** D350-748-141TRN  
**Quantity:** 14 Pieces  
**Weight:** 560 Pounds  
**Material:** 4130 Alloy Steel  
**Specifications:** Heat Treat to Minimum 180 KSI (MIL-T-6736OR AMS 2759-IC)

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This is to certify that the above parts were processed as indicated above and conform to the specification requirements.

### Results:

HRC 40 (182 KSI Tensile Strength)

*Silvia*

METLAB  
Quality Representative      Mark Podob

MERCURY CONTAMINATION: During the heat treating process, testing and inspections, the product did not come in direct contact with mercury or any of its compounds nor with any mercury containing device.



Heat Treating and Metallurgical Consulting

## D350 X-TUBE CUFF MEASURMENTS

TYPE	BATCH #	SIDE A	SIDE B
		TWO READINGS	TWO READINGS
AFT	B79393	2.221"/2.251"	2.227"/2.252"
AFT	B79391	2.251"/2.241"	2.236"/2.252"
AFT	B79392	2.238"/2.248"	2.220"/2.262"
AFT	B73372	2.243"/2.247"	2.223"/2.263"
AFT	B73375	2.245"/2.250"	2.236"/2.266"
FWD	B79010	2.230"/2.252"	2.235"/2.245"
FWD	B79011	2.200"/2.280"	2.248"/2.249"
FWD	B74718	2.208"/2.289"	2.242"/2.252"
FWD	B74673	2.189"/2.298"	2.247"/2.238"
FWD	B74678	2.240"/2.258"	2.262"/2.236"
FWD	B74672	2.253"/2.266"	2.260"/2.253"
FWD	B74712	2.264"/2.251"	2.255"/2.258"
FWD	B74676	2.229"/2.263"	2.239"/2.254"
FWD	B79013	2.249"/2.2236"	2.243"/2.245"

Notes: tubes are NOT sandblasted and are still a little crooked

REF#

817010

172/24